```
Filename:AW
'Filename:SCIFAIR↵
Lbl 0↵
Menu "which type","regular",1,"modified",2,"inclined",3,"exit",4↵
'↵
'↵
'↵
'Regular Atwood Machine↵
Lbl 1↵
"M#E5D1"?→A↵
"M#E5D2"?→B↵
(9.8×(B−A))÷(A+B)→S↵
↵
(A×9.8)+(A×S)→T↵
(B×9.8)−T→F↵
"Tension: "↵
T◢
"Net Force: "↵
F◢
"Acceleration: "↵
S◢
Do↵
LpWhile Getkey≠31↵
ClrText↵
Goto 0↵
'↵
'↵
'↵
'Modified Atwood Machine↵
Lbl 2↵
Menu "Friction?","Yes",5,"No",6↵
'Friction↵
Lbl 5↵
"M#E5D1"?→A↵
"M#E5D2"?→B↵
"#E64Bs"?→M↵
"#E64Bk"?→U↵
If (B×9.8)>(M×A×9.8)↵
Then (B×9.8)−(U×A×9.8)→F↵
F÷(A+B)→S↵
(B×9.8)−(B×S)→T↵
Else 0→F↵
F÷(A+B)→S↵
(B×9.8)+(B×S)→T↵
IfEnd↵
"Tension: "↵
T◢
"Net Force: "↵
F◢
```

```
"Acceleration: "↵
S◢
Do↵
LpWhile Getkey≒31↵
ClrText↵
Goto 0↵
'No Friction↵
Lbl 6↵
"M#E5D1"?→A↵
"M#E5D2"?→B↵
(B×9.8)÷(A+B)→S↵
B×(9.8-S)→T↵
B×9.8→F↵
"Tension: "↵
T◢
"Net Force: "↵
F◢
"Acceleration: "↵
S◢
Do↵
LpWhile Getkey≒31↵
ClrText↵
Goto 0↵
'↵
'↵
'↵
'Inclined Plane↵
Lbl 3↵
Menu "Friction?","Yes",7,"No",8↵
'Friction↵
Lbl 7↵
"M#E5D1"?→A↵
"M#E5D2"?→B↵
"#E64Bs"?→M↵
"#E64Bk"?→U↵
"#E647"?→Tθptch↵
If B>A↵
Then If (M×cos Tθptch×A×9.8)>(B×9.8)↵
Then 0→F↵
F÷(A+B)→S↵
(B×9.8)+(B×S)→T↵
Else (B×9.8)-(U×cos Tθptch×A×9.8)→F↵
F÷(A+B)→S↵
(B×9.8)-(B×S)→T↵
IfEnd↵
Else If ((M×A×9.8×cos Tθptch)+(B×9.8))>(A×9.8×sin Tθptch)↵
Then (0→F)↵
F÷(A+B)→S↵
A×(S+(9.8×sin Tθptch)-(M×9.8×cos Tθptch))→T↵
```

```
Else If (A×9.8×sin Tθptch)>((M×A×9.8×cos Tθptch)+(B×9.8))↲
Then (A×9.8×sin Tθptch)-((U×A×9.8×cos Tθptch)+(B×9.8))→F↲
F÷(A+B)→S↲
(A×9.8)+(A×S)→T↲
Else (((U×A×9.8×cos Tθptch)+(B×9.8))-(A×9.8×sin Tθptch))→F↲
F÷(A+B)→S↲
A×(S+(9.8×sin Tθptch)-(M×9.8×cos Tθptch))→T↲
IfEnd↲
IfEnd↲
"Tension: "↲
T◢
"Net Force: "↲
F◢
"Acceleration: "↲
S◢
Do↲
LpWhile Getkey≒31↲
ClrText↲
Goto 0↲
'No Friction↲
Lbl 8↲
"M#E5D1"?→A↲
"M#E5D2"?→B↲
"#E647"?→Tθptch↲
If B>A↲
Then ((B×9.8)-(sin Tθptch×9.8×A))→F↲
F÷(A+B)→S↲
↲
(B×9.8)-(B×S)→T↲
Else ((sin Tθptch×9.8×A)-(B×9.8))→F↲
F÷(A+B)→S↲
(B×9.8)+(B×S)→T↲
IfEnd↲
"Tension: "↲
T◢
"Net Force: "↲
F◢
"Acceleration: "↲
S◢
Do↲
LpWhile Getkey≒31↲
ClrText↲
Goto 0↲
Lbl 4↲
Stop↲
```